

Exhibit B
Category Budget

Budget Category Item	PIER Share (\$)	Match Share (\$)	Total Cost (\$)
Personnel:			
Direct Labor	\$ 62,954	\$ 46,041	\$ 108,995
Fringe Benefits	\$ 26,754	\$ 19,568	\$ 46,322
Total Personal Services	\$ 89,708	\$ 65,609	\$ 155,317
Operating Expenses:			
Travel	\$ 30,679	\$ 4,374	\$ 35,053
Equipment	\$ -	\$ -	\$ -
Materials / Supplies	\$ -	\$ 27,926	\$ 27,926
Contractual	\$ 100,000	\$ 330,000	\$ 430,000
Miscellaneous		\$ 14,500	\$ 14,500
Total Operating Expenses	\$ 130,679	\$ 376,800	\$ 507,479
Overhead:			
Overhead	\$ 115,724	\$ 84,636	\$ 200,360
Total Overhead	\$ 115,724	\$ 84,636	\$ 200,360
Total	\$ 336,111	\$ 527,045	\$ 863,156
G&A	\$ 63,862	\$ 37,438	\$ 101,300
Total	\$ 399,973	\$ 564,483	\$ 964,456

Exhibit B Budget Details

Direct Labor, Unloaded Hourly Rates

Title / Job Classification	Maximum Rate to be Billed* (\$ / Hr)	Number of Hours	PIER Share	Match Share	Total Cost
Professional Level I (Apr 10 - Mar 11; Priced at \$25.24 - \$26.25)	\$ 36.40		\$ -	\$ -	\$ -
Professional Level II (Apr 10 - Mar 11; Priced at \$31.67 - \$32.94)	\$ 42.64		\$ -	\$ -	\$ -
Professional Level III (Apr 10 - Mar 11; Priced at \$38.67 - \$40.22) - Chun	\$ 52.00	378	\$ 14,979	\$ -	\$ 14,979
Professional Level IV (Apr 10 - Mar 11; Priced at \$49.12 - \$51.08) - David	\$ 75.92	531	\$ 26,704	\$ -	\$ 26,704
Professional Level V (Apr 10 - Mar 11; Priced at \$55.17 - \$57.38)	\$ 78.00		\$ -	\$ -	\$ -
Professional Level VI (Apr 10 - Mar 11; Priced at \$66.35 - \$69.00)	\$ 83.20		\$ -	\$ -	\$ -
Professional Level VII (Apr 10 - Mar 11; Priced at \$78.02 - \$81.14)	\$ 88.40		\$ -	\$ -	\$ -
Technical Level I (Apr 10 - Mar 11; Priced at \$17.66 - \$18.37)	\$ 22.88		\$ -	\$ -	\$ -
Technical Level II (Apr 10 - Mar 11; Priced at \$18.59 - \$19.33)	\$ 26.00		\$ -	\$ -	\$ -
Technical Level III (Apr 10 - Mar 11; Priced at \$23.17 - \$24.10)	\$ 29.12		\$ -	\$ -	\$ -
Technical Level IV (Apr 10 - Mar 11; Priced at \$26.45 - \$27.51)	\$ 32.24		\$ -	\$ -	\$ -
Technical Level V (Apr 10 - Mar 11; Priced at \$28.95 - \$30.11)	\$ 33.28		\$ -	\$ -	\$ -
Administrative (Apr 10 - Mar 11; Priced at \$31.75 - \$33.02)	\$ 38.48		\$ -	\$ -	\$ -
Professional Level I (Apr 11 - Oct 11; Priced at \$26.25)	\$ 36.40		\$ -	\$ -	\$ -
Professional Level II (Apr 11 - Oct 11; Priced at \$32.94)	\$ 42.64		\$ -	\$ -	\$ -
Professional Level III (Apr 11 - Oct 11; Priced at \$40.22) - Chun Choi	\$ 52.00	144	\$ 6,023	\$ -	\$ 6,023
Professional Level IV (Apr 11 - Oct 11; Priced at \$51.08) - David Cygan	\$ 75.92	287	\$ 15,248	\$ -	\$ 15,248
Professional Level V (Apr 11 - Oct 11; Priced at \$57.38)	\$ 78.00		\$ -	\$ -	\$ -
Professional Level VI (Apr 11 - Oct 11; Priced at \$69.00)	\$ 83.20		\$ -	\$ -	\$ -
Professional Level VII (Apr 11 - Oct 11; Priced at \$81.14)	\$ 88.40		\$ -	\$ -	\$ -
Technical Level I (Apr 11 - Oct 11; Priced at \$18.37)	\$ 22.88		\$ -	\$ -	\$ -
Technical Level II (Apr 11 - Oct 11; Priced at \$19.33)	\$ 26.00		\$ -	\$ -	\$ -
Technical Level III (Apr 11 - Oct 11; Priced at \$24.10)	\$ 29.12		\$ -	\$ -	\$ -
Technical Level IV (Apr 11 - Oct 11; Priced at \$27.51)	\$ 32.24		\$ -	\$ -	\$ -
Technical Level V (Apr 11 - Oct 11; Priced at \$30.11)	\$ 33.28		\$ -	\$ -	\$ -
Administrative (Apr 11 - Oct 11; Priced at \$33.02)	\$ 38.48		\$ -	\$ -	\$ -
Professional Level III (Nov 09 - Mar 10; Priced at \$45.97) - Chun Choi	\$ 52.00	25	\$ -	\$ 1,149	\$ 1,149
Professional Level IV (Nov 09 - Mar 10; Priced at \$58.41) - David Cygan	\$ 75.92	67	\$ -	\$ 3,913	\$ 3,913
Technical Level II (Nov 09 - Mar 10; Priced at \$20.55)	\$ 26.00	82	\$ -	\$ 1,685	\$ 1,685
Professional Level III (Apr 10 - Mar 11; Priced at \$47.81)	\$ 52.00	158	\$ -	\$ 7,553	\$ 7,553
Professional Level IV (Apr 10 - Mar 11; Priced at \$60.74)	\$ 75.92	227	\$ -	\$ 13,789	\$ 13,789
Technical Level V (Apr 10 - Mar 11; Priced at \$33.75)	\$ 33.28	460	\$ -	\$ 15,523	\$ 15,523
Professional Level III (Apr 11 - Oct 11; Priced at \$49.72)	\$ 52.00	12	\$ -	\$ 597	\$ 597
Professional Level IV (Apr 11 - Oct 11; Priced at \$63.17)	\$ 75.92	29	\$ -	\$ 1,832	\$ 1,832
Total Direct Labor			\$ 62,954	\$ 46,041	\$ 108,995

* Maximum salary rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Fringe Benefits

Title / Job Classification	Maximum % Rate to be Billed*	Base (Typically Total Direct Labor)	PIER Share	Match Share	Total Cost
Applicable to all Labor Categories/Job Classifications	42.5%	\$108,994.00	\$ 26,755	\$ 19,568	\$ 46,323
Total Fringe Benefits			\$ 26,755	\$ 19,568	\$ 46,323

* Maximum fringe benefit rates are caps: PIER will not reimburse at a higher rate over the term of the project.

Exhibit B Budget Details

Travel**

Location	Purpose	Number of Trips	People per Trip	PIER Share*	Match Share	Total Cost
Los Angeles, CA	Attend Kick-off Meeting	1	2	\$ 2,986	\$ -	\$ 2,986
Los Angeles, CA	Critical Project Review	2	2	\$ 6,816	\$ -	\$ 6,816
Los Angeles, CA	Final Meeting	1	2	\$ 3,408	\$ -	\$ 3,408
Los Angeles, CA	Host Site Visit	1	1	\$ 1,667	\$ -	\$ 1,667
Los Angeles, CA	Design Review	1	2	\$ 3,184	\$ -	\$ 3,184
Los Angeles, CA	Field Install	2	2	\$ 8,244	\$ -	\$ 8,244
Los Angeles, CA	Data Collection	4	1	\$ 4,374	\$ 4,374	\$ 8,748
Total Travel				\$ 30,679	\$ 4,374	\$ 35,053

* PIER Share: Travel is reimbursed at State rates. Higher travel costs can count as Match Share.

** Trips listed as "to be determined (TBD)" require advanced written approval from Commission Project Manager.

Equipment

Item	Quantity	Unit Cost	PIER Share	Match Share	Total Cost
		\$ -	\$ -	\$ -	\$ -
Total Equipment			\$ -	\$ -	\$ -

Materials, Supplies

Item	Quantity	Unit Cost	PIER Share	Match Share	Total Cost
Pump and piping	TBD	misc	\$ -	\$ 16,000	\$ 16,000
Thermocouples and test equipment	TBD	misc	\$ -	\$ 11,926	\$ 11,926
Total Materials and Supplies			\$ -	\$ 27,926	\$ 27,926

Contractual

Subcontractor Name	Purpose	PIER Share	Match Share	Total Cost
B2U Solar	Attend Kick-off Meeting	\$ -	\$ 700	\$ 700
B2U Solar	Critical Project Review Meetings	\$ -	\$ 6,000	\$ 6,000
B2U Solar	Final Meeting	\$ -	\$ 1,000	\$ 1,000
B2U Solar	Monthly Progress Reports	\$ -	\$ 4,000	\$ 4,000
B2U Solar	Final Report	\$ -	\$ 7,500	\$ 7,500
B2U Solar	Identify and Obtain Matching Funds	\$ -	\$ 500	\$ 500
B2U Solar	Identify and Obtain Required Permits	\$ -	\$ 4,500	\$ 4,500
B2U Solar	Host Site Agreement	\$ -	\$ 2,500	\$ 2,500
B2U Solar	Host Site Agreement	\$ 3,000	\$ -	\$ 3,000
B2U Solar	Design, Engineering, and Fabrication	\$ 10,000	\$ 140,000	\$ 150,000
B2U Solar	Laboratory Validation	\$ 3,000	\$ 6,000	\$ 9,000
B2U Solar	Field Unit Installation and Shakedown	\$ 33,000	\$ 70,000	\$ 103,000
B2U Solar	Data Collection, Processing, and Analysis	\$ 15,000	\$ 17,300	\$ 32,300

Exhibit B Budget Details

B2U Solar	Design Commercial Packages for Other Applications	\$ 8,000	\$ 13,000	\$ 21,000
B2U Solar	Technology Transfer Activities	\$ 16,000	\$ 16,000	\$ 32,000
B2U Solar	Production Readiness Plan	\$ 12,000	\$ 11,000	\$ 23,000
Miller Brewing Co	Field Unit Installation and Shakedown	\$ -	\$ 30,000	\$ 30,000
Total Contractual		\$ 100,000	\$ 330,000	\$ 430,000

Miscellaneous

Item	Purpose			PIER Share	Match Share	Total Cost
Outside Contractor-Supporting structure	TBD	1	\$ -	\$ -	\$ 14,500	\$ 14,500
Total Miscellaneous				\$ -	\$ 14,500	\$ 14,500

Overhead

Name of Overhead	Overhead Base*	Maximum % Rate to be Billed**	Base Cost	PIER Share	Match Share	Total Cost
Labor Overhead	Direct Labor + Fringe Benefits	129%	\$ 155,318.00	\$ 115,724	\$ 84,636	\$ 200,360
G&A	Direct Labor + Fringe Benefits + Travel + Equipment + Materials, Supplies + Miscellaneous + Labor Overhead + Contractual	19%	\$ 533,156.00	\$ 63,862	\$ 37,438	\$ 101,300
Total Overhead				\$ 179,586	\$ 122,074	\$ 301,660

* Base: Define cost categories used to charge Overhead rate, e.g., Total Labor, Total Direct Cost, Materials, Subcontracts, etc.

** Maximum Indirect Overhead rates are caps: PIER will not reimburse at higher rates over the term of the project.

Exhibit B Budget Summary by Task

Task #	Task Name	PIER Funding (\$)	Match Funding (\$)	Total (\$)
1.1	Attend Kick-off Meeting	\$11,735	\$700	\$12,435
1.2	Critical Project Review Meetings	\$31,255	\$6,000	\$37,255
1.3	Final Meeting	\$15,855	\$1,000	\$16,855
1.4	Monthly Progress Reports	\$4,779	\$4,000	\$8,779
1.5	Final Report	\$22,897	\$7,500	\$30,397
1.6	Identify & Obtain Matching Funds	\$0	\$500	\$500
1.7	Identify & Obtain Required Permits	\$0	\$4,500	\$4,500
2	Host Site Agreement	\$18,143	\$11,852	\$0
3	Design, Engineering, and Fabrication	\$56,599	\$156,851	\$213,450
4	Laboratory Validation	\$3,570	\$169,709	\$173,279
5	Field Unit Installation and Shakedown	\$85,954	\$114,053	\$200,007
6	Data Collection, Processing, and Analysis	\$71,686	\$38,387	\$110,073
7	Design Commercial Packages for Other Applications	\$44,180	\$22,431	\$66,611
8	Technology Transfer Activities	\$19,040	\$16,000	\$35,040
9	Production Readiness Plan	\$14,280	\$11,000	\$25,280
	Total	\$399,973	\$564,483	\$934,461

Exhibit B PIER Funding By Task

PIER Funding (\$)		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
Task	Project Administration Activities										
1.1	Attend Kick-off Meeting	2,107	895	2,986					3,873	1,874	\$11,735
1.2	Critical Project Review Meetings	5,960	2,533	6,816					10,956	4,990	\$31,255
1.3	Final Meeting	3,039	1,291	3,408					5,586	2,531	\$15,855
1.4	Monthly Progress Reports	1,231	523						2,262	763	\$4,779
1.5	Final Report	5,896	2,506						10,839	3,656	\$22,897
1.6	Identify and Obtain Matching Funds										\$0
1.7	Identify and Obtain Required Permits										\$0
	Administration Activities Subtotals	\$18,233	\$7,748	\$13,210	\$0	\$0	\$0	\$0	\$33,516	\$13,814	\$86,521
Task	Project Technical Activities										
2	Host Site Agreement	3,242	1,378	1,667			3,000		5,959	2,897	\$18,143
3	Design, Engineering, and Fabrication	10,535	4,477	3,184			10,000		19,366	9,037	\$56,599
4	Laboratory Validation						3,000			570	\$3,570
5	Field Unit Installation and Shakedown	9,495	4,036	8,244			33,000		17,455	13,724	\$85,954
6	Data Collection, Processing, and Analysis	12,523	5,322	4,374			15,000		23,021	11,446	\$71,686
7	Design Commercial Packages for Other Applications	8,926	3,793				8,000		16,407	7,054	\$44,180
8	Technology Transfer Activities						16,000			3,040	\$19,040
9	Production Readiness Plan						12,000			2,280	\$14,280
	Technical Activities Subtotals	\$44,721	\$19,006	\$17,469	\$0	\$0	\$100,000	\$0	\$82,208	\$50,048	\$313,452
		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
	PIER Reimbursable Totals	\$62,954	\$26,754	\$30,679	\$0	\$0	\$100,000	\$0	\$115,724	\$63,862	\$399,973
	Percent of the Total	16%	7%	8%	0%	0%	25%	0%	29%	16%	100%

Exhibit B Match Budget

Match Funding (\$)		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
Task 1	Project Administration Activities										
1.1	Attend Kick-off Meeting						700				\$700
1.2	Critical Project Review Meetings						6,000				\$6,000
1.3	Final Meeting						1,000				\$1,000
1.4	Monthly Progress Reports						4,000				\$4,000
1.5	Final Report						7,500				\$7,500
1.6	Identify & Obtain Matching Funds						500				\$500
1.7	Identify & Obtain Required Permits						4,500				\$4,500
1.8	Establish the PAC (optional)										\$0
1.9	Conduct PAC Meetings (optional)										\$0
	Administration Activities Subtotals	\$0	\$0	\$0	\$0	\$0	\$24,200	\$0	\$0	\$0	\$24,200
Task	Project Technical Activities										
2	Host Site Agreement	2,408	1,024				2,500		4,427	1,493	\$11,852
3	Design, Engineering, and Fabrication	4,339	1,844				140,000		7,978	2,690	\$156,851
4	Laboratory Validation	29,156	12,392			27,926	6,000	14,500	53,597	26,138	\$169,709
5	Field Unit Installation and Shakedown	3,619	1,538				100,000		6,652	2,244	\$114,053
6	Data Collection, Processing, and Analysis	4,090	1,738	4,374			17,300		7,518	3,367	\$38,387
7	Design Commercial Packages for Other Applications	2,429	1,032				13,000		4,464	1,506	\$22,431
8	Technology Transfer Activities						16,000				\$16,000
9	Production Readiness Plan						11,000				\$11,000
	Technical Activities Subtotals	\$46,041	\$19,568	\$4,374	\$0	\$27,926	\$305,800	\$14,500	\$84,636	\$37,438	\$540,283
		Direct Labor	Fringe Benefits	Travel	Equipment	Materials	Contractual	Misc	Indirect Overhead	G&A	Total
Match Funds Totals		\$46,041	\$19,568	\$4,374	\$0	\$27,926	\$330,000	\$14,500	\$84,636	\$37,438	\$564,483
Percentage of the Total		8%	3%	1%	0%	5%	58%	3%	15%	7%	100%